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## Wildland Urban Interface Area Inventory Assessment



Chris Gober, Bernalillo County Fire Department  
Frank Barka, Bernalillo County Fire Department  
Karen Lightfoot, New Mexico State Forestry  
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## Acknowledgements

This report is the result of a cooperative team effort of the Bernalillo County Fire Department, Bernalillo County, and New Mexico Energy, Minerals, and Natural Resources Forestry Division. We would like to thank Jon Phillips and Patricia Kirby of Bernalillo County GIS. We would also like to thank Fire Chief, Bett Clark and Fire Marshal, Kent Hendrickson of the Bernalillo County Fire Department.



Bernalillo County covers a land area of 768,000 acres (approximately 1,200 square miles) in North Central New Mexico. Of this land area 124,160 acres are designated, incorporated municipal land, 324,380 acres non-municipal private, 22,400 acres non-municipal state of New Mexico public land, and 297,060 acres are federal land, including U.S. Forest Service, Bureau of Indian Affairs, Bureau of Land Management, and Department of Defense.

Bernalillo County Fire Department has identified 42 Wildland Urban Interface areas within the County of Bernalillo. Only non-federal land was considered for this assessment. We do not claim or imply that all interface concerns have been addressed in this assessment. After assessing each of the 42 areas, a hazard rating was assigned to each area, based on observed conditions of terrain, water availability, quality of defensible space, building construction, vegetative fuels, access, and distance to fire apparatus. This rating was calculated using the 2000 Urban Wildland Interface Code rating schedule.

Numbers of areas and total acres in each hazard category are summarized in table 1. An index of the assessed areas with their legal description is included in appendix 2. An assessment report of all 42 areas with a brief description and reason for the ratings can be found in appendix 1. In each of the 42 areas 10% of the homes were assessed and the scores were averaged to assure the rating accurately reflect condition over the community as a whole.

**Table 1.** Areas within each Hazard rating and size

| Number of Areas | Hazard Rating Assigned | Acreage |
|-----------------|------------------------|---------|
| 12              | Moderate               | 35,960  |
| 28              | High                   | 91,345  |
| 2               | Extreme                | 52,480  |
| Total Acres     |                        | 179,785 |

In areas where the individual ratings were very variable within an area, the higher average rating was assigned. Maps showing the location of Bernalillo County in New Mexico, Bernalillo County Wildland Urban Interface Areas, Vegetative fuels within Bernalillo County are attached.

Much of Bernalillo County is considered a high-hazard fire environment. Based on recent history, the area possesses all of the ingredients necessary to support large, intense and uncontrollable Wildland fires.

Within this hazardous environment are individual houses, subdivisions and entire communities. Many of these homeowners, however, are ill prepared to survive an intense wildfire. Since it is not a question of if a wildfire will occur but when, the likelihood of human life and property loss is great and growing.

There is increasing recognition that our ability to live more safely in this fire environment depends on pre-fire activities. These are actions taken before wildfire occurs that improve the survivability of people and homes. We cannot fire proof the forest, but we can provide proper vegetation management around the home (known as defensible space), use of fire-resistant building materials, appropriate subdivision design, and other measures. Research clearly indicates that pre-fire activities save lives and property.

Although firefighters have become remarkably efficient in suppressing Wildland fires, a few inevitably escape immediate control and threaten life and property and damage our ecosystem. The reality today is fire agencies cannot solve this problem alone! Firefighters will not be at every single home and protect it. Commitment from community leaders, elected officials, and real estate developers is needed. Though this will not immediately solve current interface safety problems, it will mitigate fire danger in the long term

It has only been in the last century, that fire has been viewed as an intruder by modern society. Prior to the 1900s, fire was accepted, even revered, and often used for its benefits (e.g. habitat health, land clearing and more). Seeing Wildland fires as a foe to be eliminated coincided with increased settlement into Wildland areas and our growing concern of protecting these areas. This view of “bad fire” led to the active suppression of all Wildland fires. From 1920 to 1990 we developed our economic base, technology, and skills to attack all Wildland fires vigorously, regardless of its cause. For the most part we have become very successful. Our Wildland firefighting forces are some of the finest in the world and only 4% of the fire starts escape out initial efforts. Today, 96% of all Wildland fires are successfully suppressed within hours.

These successes, however, have not been without consequences. As we keep fires smaller and smaller, many areas were converted to overgrown, unhealthy landscapes, choked with dead and dying vegetation, poor habitats, and a generally poor condition. In turn, the small percentage of the fires that escape our initial efforts, often become major conflagrations that are harder to suppress and which both threaten and destroy lives, homes, and other property as well as damage our natural resources.

As we are actively suppressing fires, a population movement is occurring. With a rapidly growing population across the country, more and more people are moving to and living in Wildland areas. This continuing movement has increased Wildland/Urban Interface (WUI) in two distinct ways,

entire subdivisions built adjacent to Wildland areas, isolated developments as surging population seeks solitude from the bustle of the city where there is inadequate fire protection.

We have a choice. We can continue to accept serious losses, or we can adapt to living in these Wildland fire environments. Reducing these losses is possible. There is no need for lives or homes to be lost. We can live with Wildland fire while protecting our lives, homes, and natural areas by creating “Firewise” communities.

The immediate plans are to educate the public in defensible space and preventable measures to minimize wildfire risk in growing communities. Education efforts aimed at homeowner associations and individual homeowners can reduce the occurrence of wildfire. We need to enforce the existing fire codes within Bernalillo County, which include; access for emergency vehicles and addressing. An emergency evacuation plan needs to be made public, for the entire County of Bernalillo.

As more and more people move into the urban interface areas of Bernalillo County there needs to be a code that addresses issues of defensible space, building materials, road quality, and fire suppression considerations for all new and existing developments within the County. For this code to be effective it needs to be enforced. The training of firefighters in current Wildland fire fighting techniques to respond and control all Wildland fires that do occur needs to be taken into consideration. A cooperative agreement with other firefighting agencies within our area needs to be established and used. And develop a plan to increase forest health in cooperation with the U.S. Forest Service, N.M State Forestry, Bureau of Land Management, and the Bureau of Indian Affairs.

Today and in the future, the population movement toward Wildland areas will continue. The result of this movement will be continually expanding the Wildland interface. The consequence will be a continually increasing number of homes and lives at risk from Wildland fire.

We know we cannot prevent or eliminate the fire threat. What we can do, however is educate ourselves and adapt to living safely in a Wildland fire environment. As with most natural phenomenon, there are no guarantees against Wildland fire, but through education and enforcement we can drastically reduce the risk of loss whether or not firefighters are there when fire strikes.